

CLAIMS

We claim:

1. A method for an application to communicate with a procedure on a remote server via the Simple Object Access Protocol (SOAP) comprising the steps of:
 - 5 issuing, by the application, a call to initialize a SOAP request, said initialization including specifying the procedure on the remote server;
 - issuing, by the application, a call to set the body of the SOAP request, using a set of parameters to specify said body;
 - 10 issuing, by the application, a call to request that the SOAP request be sent to the remote server;
 - issuing, by the application, a call to query the SOAP request to obtain status information; and
 - issuing, by the application, a call to query the SOAP request to obtain
15 response information sent from the procedure on the remote server.
2. The method of claim 1 further comprising the step of:
 - issuing, by the application, a call to set a header in the SOAP request,
20 including in said header a value for the mustUnderstand attribute;
3. The method of claim 1 wherein the call to request that the SOAP request be sent to the remote server does not return until either response information is received from the remote server or a set amount of time passes.
- 25 4. The method of claim 1 wherein the SOAP request is a software object and the issued calls are to methods of the SOAP request software object.
5. The method of claim 4 further comprising the step of:
 - issuing, by the application, a call to instantiate the SOAP request software
30 object.

6. A computer-readable medium containing instructions that when executed cause a computer to communicate with a procedure on a remote server by performing the steps of:

initializing a SOAP request, said initialization including specifying the procedure on the remote server;
setting the body of the SOAP request, using a set of parameters to specify said body;
sending the SOAP request to the remote server; and
querying the SOAP request to obtain status and response information.

7. A system for using SOAP to communicate with a server application on a remote host comprising:

a local host;
a client application running on the local host;
a communications link connecting the local host with the remote host; and
a set of functions running on the local host callable by the client application to specify a SOAP request, to send the SOAP request to the remote host via the communications link, and to obtain status and response information concerning the SOAP request.

8. The system of claim 7 wherein the set of functions is an application programming interface (API).

9. The system of claim 8 wherein information passed through the API is in the form of parameters.

10. The system of claim 8 wherein the API consists essentially of software objects.

11. An API presented by an operating system comprising a software object into which the fields of a SOAP request can be written and which supports methods for requesting that the SOAP request be sent to a remote server, for retrieving response information sent from the remote server, and for retrieving status information about the SOAP request.
12. A computer-readable medium containing instructions that when executed cause an operating system to present an API comprising a software object into which the fields of a SOAP request can be written and which supports methods for requesting that the SOAP request be sent to a remote server, for retrieving response information sent from the remote server, and for retrieving status information about the SOAP request.